

CLAIMS

What Is Claimed Is:

1. An apparatus, comprising:
a heat absorber attached to a first end of a base, the heat absorber and the base formed of a thermally conductive material, wherein a width of the heat absorber is greater than a width of the base.
2. The apparatus of Claim 1, wherein the thermally conductive material is copper.
3. The apparatus of Claim 1, wherein the heat absorber further includes a planar bottom surface, the planar bottom surface having a first surface area approximately equal to a second surface area of a heat producing region of a computer processor.
4. The apparatus of Claim 1, wherein the heat absorber further includes:
a planar bottom surface having a first surface area approximately equal to a second surface area of an integrated heat spreader attached to a silicon die.
5. The apparatus of Claim 1, further comprising:
a heat dissipator attached to a second end of the base.
6. The apparatus of Claim 5, further comprising:

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a plurality of fins formed of the thermally conductive material, the plurality of fins attached to a bottom surface of the heat dissipator, the fins having a length approximately equal to the width of the base.

7. The apparatus of Claim 6, wherein the thermally conductive material is a material selected from the group consisting of copper, a copper alloy, or aluminum.

8. An apparatus, comprising:

a base formed of a heat conductive material, the base having a first end and a second end;

a heat absorber attached to the first end of the base, the heat absorber having a first width greater than a second width of the base, the heat absorber having a top surface and a planar bottom surface, the planar bottom surface having a first surface area approximately equal to a second surface area of an integrated heat spreader attached to a silicon die; and

a heat dissipator attached to the second end of the base.

9. The apparatus of Claim 8, wherein the heat dissipator has a third width approximately equal to the second width of the base.

10. The apparatus of Claim 8, further comprising:

a plurality of fins formed of the heat conductive material, the plurality of fins attached to a bottom surface of the heat dissipator, the plurality of fins having a length approximately equal to the second width of the base.

11. The apparatus of Claim 10, wherein the heat conductive material is a material selected from the group consisting of copper, a copper alloy, or aluminum.

12. The apparatus of Claim 8, wherein the heat conductive material is copper.

13. A computer system, comprising:

a processor mounted to a printed circuit board;

a bus coupled with the processor;

a memory coupled with the bus; and

a heat absorber formed of a thermally conductive material and coupled with the processor, the heat absorber attached to a first end of a base formed of the thermally conductive material, wherein a width of the heat absorber is greater than a width of the base.

14. The computer system of Claim 13, wherein the thermally conductive material is copper.

15. The computer system of Claim 13, wherein the heat absorber has a bottom surface, the bottom surface having a first surface area approximately equal to a second

surface area of a mating surface of the processor.

16. The computer system of Claim 13, further comprising:

a heat dissipator attached to a second end of the base.

17. The computer system of Claim 16, further comprising:

a plurality of fins formed of the thermally conductive material, the plurality of fins attached to a bottom surface of the heat dissipator, the plurality of fins having a length approximately equal to the width of the base.

18. The computer system of Claim 17, wherein the thermally conductive material is copper.